

**search**

[Home](#) > [Peer Review Meetings](#) > [Review Group Descriptions](#) > [OBT - Oncology 1 - Basic Translational](#)  
**Scientific Areas of Integrated Review Groups (IRGs)**

For a listing of the Scientific Review Officer and membership roster for each study section, click on the study section roster under the study section name within an IRG listed below or go to the [study section index](#) (study sections listed alphabetically) and click on the specified roster next to the name of the study section.

**Oncology 1 - Basic Translational IRG [OBT]**[Create Printer Friendly \(PDF File\)](#)

- [Cancer Molecular Pathobiology Study Section \[CAMP\]](#)
- [Cancer Etiology Study Section \[CE\]](#)
- [Cancer Genetics Study Section \[CG\]](#)
- [Molecular Oncogenesis Study Section \[MONC\]](#)
- [Tumor Cell Biology Study Section \[TCB\]](#)
- [Tumor Microenvironment Study Section \[TME\]](#)
- [Tumor Progression and Metastasis Study Section \[TPM\]](#)

**Cancer Molecular Pathobiology Study Section [CAMP]**

[\[CAMP Membership Roster\]](#) [\[CAMP Meeting Rosters\]](#)

The Cancer Molecular Pathobiology [CAMP] Study Section reviews applications involving the pathology of the malignant cell with the emphasis on mechanisms controlling cell growth and death, and the molecular events in gene regulation. Emphasis is on pathological approaches to oncogenesis and the basic cellular events involving growth of transformed cells. Specific areas covered by CAMP:

- Oncogenes and tumor suppressor genes and signaling transduction pathways in oncogenesis
- Gene regulation including chromatin structure and remodeling, transcription, RNA processing and stability, and translation relevant to oncogenesis
- Role of characterized stem cells in oncogenesis
- Cell death pathways (both apoptotic and non-apoptotic) and autophagy in cancer
- Mechanisms involving senescence, telomeres and telomerase regulation during malignant transformation

**The study sections with the most closely related areas of similar science listed in rank order are:**

[Molecular Oncogenesis Study Section \[MONC\]](#)

[Tumor Cell Biology Study Section \[TCB\]](#)

[Basic Mechanisms of Cancer Therapeutics Study Section \[BMCT\]](#)

---

[TOP](#)

## Cancer Etiology Study Section [CE]

[\[CE Membership Roster\]](#) [\[CE Meeting Rosters\]](#)

The Cancer Etiology Study Section reviews grant applications related to the causal agents, processes, and cells involved in early events in carcinogenesis. The areas included within CE involve gene regulation, DNA damage and repair mechanisms, chemical and viral carcinogenesis. The emphasis is on linking disciplines of chemistry and pathology on the etiology of cancer. Specific areas covered by CE:

- Chemical- and environmental induced carcinogenesis
- Identification of causal agents such as xenobiotics and their ability to modulate gene regulation at the transcriptional level, RNA stability and processing, in early carcinogenesis events
- DNA adducts, DNA damage and repair mechanisms, metabolism of endogenous and exogenous compounds that modulate early events in carcinogenesis
- Responses to stress such as free radicals, oxidative stress and reactive oxygen species as they contribute to the carcinogenesis process
- Contribution of non HIV/AIDS viruses to carcinogenesis

**The study section with the most closely related areas of similar science listed in rank order are:**

[Radiation Therapeutics and Biology Study Section \[RTB\]](#)

[Cancer Molecular Pathobiology Study Section \[CAMP\]](#)

[Molecular Oncogenesis Study Section \[MONC\]](#)

[Cancer Genetics Study Section \[CG\]](#)

[Macromolecular Structure and Function Study Sections \[MSFA\]](#)

[Molecular Genetics A Study Section \[MGA\]](#)

[Molecular Genetics B Study Section \[MGB\]](#)

[Molecular Genetics C Study Section \[MGC\]](#)

---

[TOP](#)

## Cancer Genetics Study Section [CG]

[\[CG Membership Roster\]](#) [\[CG Meeting Rosters\]](#)

The Cancer Genetics [CG] Study Section reviews applications related to the causal agents and target genes involved in tumor pathogenesis. Organ-specific carcinogenesis is included in this study section. Studies using both mammalian and non-mammalian models are included. Specific areas covered by CG:

- Oncogene discovery, genomics, and proteomics (including molecular and biochemical profiling), Animal models for gene discovery, positional cloning
- Cancer genetics: including hereditary and somatic DNA alterations, allelic imbalance. and Loss of heterozygosity (LOH)
- Epigenetics: including DNA methylation and imprinting
- Genomic instability: including microsatellite and chromosomal instability
- Susceptibility/modifier genes that modify susceptibility to cancer without allelic loss including low penetrance genes identified in human and animal models

**The study section with most closely related areas of similar science listed in rank order are:**

[Cancer Biomarkers Study Section \[CBSS\]](#)  
[Tumor Progression and Metastasis Study Section \[TPM\]](#)  
[Molecular Oncogenesis Study Section \[MONC\]](#)  
[Cancer Etiology Study Section \[CE\]](#)  
[Molecular Genetics A Study Section \[MGA\]](#)  
[Molecular Genetics B Study Section \[MGB\]](#)  
[Molecular Genetics C Study Section \[MGC\]](#)

---

[TOP](#)

## Molecular Oncogenesis Study Section [MONC]

[\[MONC Membership Roster\]](#) [\[MONC Meeting Rosters\]](#)

The Molecular Oncogenesis [MONC] Study Section reviews applications that focus on the early molecular events that lead to immortalization and oncogenic transformation such as the identification of oncogenes and tumor suppressor genes, alterations in signaling, growth, and cell cycle control pathways, and protein stability/degradation mechanisms. Applications dealing with normal developmental processes as they pertain to oncogenic transformation, including the identification and characterization of progenitor and cancer stem cells are also considered. Specific areas covered by MONC:

- Identification of oncogenes and tumor suppressor genes or alterations in their expression, regulation or function that may contribute to oncogenic transformation
- Alterations in signal transduction pathways that may modulate or lead to oncogenic transformation
- Identification and characterization of progenitor cells and cancer stem cells that may be involved in oncogenic transformation
- Cell cycle regulation and dysregulation that may contribute to early oncogenic transformation
- Proteasome-mediated degradation: Mechanisms and/or alterations of protein stability that could contribute to transformation, including post-translation modification such as ubiquitylation or sumoylation

**The study sections with the most closely related of similar science listed in rank order are:**

[Cancer Molecular Pathobiology Study Section \[CAMP\]](#)  
[Tumor Cell Biology Study Section \[TCB\]](#)  
[Cancer Etiology Study Section \[CE\]](#)  
[Cancer Genetics Study Section \[CG\]](#)  
[Cellular Signaling and Regulatory Systems Study Section \[CSRS\]](#)

---

[TOP](#)

## Tumor Cell Biology Study Section [TCB]

[\[TCB Membership Roster\]](#) [\[TCB Meeting Rosters\]](#)

The Tumor Cell Biology [TCB] Study Section reviews applications concerned with signal transduction mechanisms in neoplastic cells, regulation of tumor cell phenotype and behavior, and tumor progression. Emphasis is on signaling processes mediated by kinases, phosphatases and other molecules, including oncogenes, tumor suppressors, various growth factors and receptors, in tumor cells and animal tumor models. Specific areas covered by TCB:

- Signal transduction processes mediated by kinases and phosphatases and other molecules, including growth factors, nuclear factors and receptors
- Pathways regulated by oncogenes and tumor suppressors that affect tumor cell phenotype and behavior, such as survival, proliferation, and death
- The analysis of the composition and function of signaling complexes and their interactions among different signaling pathways in the context of tumor biology and tumor progression
- Hormonal modulation of tumorigenesis, including endocrine signaling and hormone receptors mechanisms
- Mechanisms that regulate differentiation and trans-differentiation in neoplasia, signal transduction mediated by cytoskeletal components and nutrient sensing mechanisms in tumor biology

**The study sections with most closely related areas of similar science listed in rank order are:**

[Cancer Molecular Pathobiology \[CAMP\]](#)  
[Tumor Progression and Metastasis \[TPM\]](#)  
[Tumor Microenvironment \[TME\]](#)  
[Molecular Oncogenesis \[MONC\]](#)  
[Cancer Etiology \[CE\]](#)

---

[TOP](#)

## Tumor Microenvironment Study Section [TME]

[\[TME Membership Roster\]](#) [\[TME Meeting Rosters\]](#)

The Tumor Microenvironment [TME] Study Section reviews grant applications that deal with basic mechanisms of interactions between tumor and host system including stroma cells, extracellular matrix (ECM) and extracellular molecules. Emphasis is on evaluation of the tumor as an organ-like structure with complex, dynamic cross-talk. Studies of tumor-stroma interactions including cell-cell interaction, tumor induced alterations of ECM during tumor progression and metastasis, tumor angiogenesis and lymphangiogenesis, and organ specific metastasis are assigned to this study section. Specific areas covered by TME:

- Molecular and cellular aspects of bi-directional interaction between tumor and stromal cells (including fibroblasts, glial cells, epithelial cells, adipocytes, immune cells, inflammatory cells, vascular compartments, and bone marrow cells) during neoplastic progression, tumor angiogenesis, growth and metastasis, including studies of cancer stem cell niche and tumor cell dormancy
- Evaluation of tumor induced alterations in extracellular matrix during tumor progression. Cellular and molecular aspects of epithelial-mesenchymal transition (EMT) and transactivation as it relates to tumor progression
- Dynamics of cell-cell communication for tumor cell survival, growth and invasion focusing on cell adhesion molecules, cell junctions, as well as intercellular signaling and production of paracrine factors, chemokines, and inflammatory cytokines
- Development and exploration and physiologically responsive in vitro 3D matrix and organotypic models and animal models that allow investigation of tumor cells in the context of a tissue-like and in vivo environment
- Development and investigation of models for studying organ-specific metastases, crucial interactions between metastatic cells and site specific organs including bone/bone marrow microenvironment and other site-specific organs such as lung and brain

**The study sections with most closely related areas of similar science listed in rank order are:**

[Tumor Progression and Metastasis Study Section \[TPM\]](#)  
[Tumor Cell Biology Study Section \[TCB\]](#)  
[Transplantation, Tolerance and Tumor Immunology Study Section \[TTT\]](#)  
[Hematopoiesis Study Section \[HP\]](#)  
[Cellular Mechanisms in Aging and Development Study Section \[CMAD\]](#)

## Tumor Progression and Metastasis Study Section [TPM]

[\[TPM Membership Roster\]](#) [\[TPM Meeting Rosters\]](#)

The Tumor Progression and Metastasis [TPM] Study Section reviews grant applications that deal with the basic mechanisms of cancer progression, metastasis, invasion/migration and angiogenesis. Special emphasis is placed on hypoxia, inflammation, tumor imaging and pathology, adhesion, and growth. Studies focusing on cytoskeleton, proteases, wound healing, extracellular matrix remodeling, suppressors/inhibitors of metastasis & angiogenesis, and animal models of metastasis & angiogenesis will also be assigned to this study section. Specific areas covered by TPM:

- Transcriptional, posttranscriptional, translational and posttranslational regulation of tumor metastasis and angiogenesis including role of microRNA (miRNA), small inhibitory RNA (siRNA), short hairpin RNA (shRNA), small activating RNA (saRNA), ubiquitination, acetylation, and phosphorylation
- Tumor cell adhesion, invasion/migration, and angiogenesis including angiogenic factors and their receptors.
- Role of stress in tumor metastasis & angiogenesis including the function of hypoxia and inflammation
- In vitro and in vivo models of tumor metastasis and angiogenesis including genetics and imaging analysis
- Contribution of carbohydrate modifications, wound healing, and cell membrane specializations (e.g., caveolae and lipid rafts) as they relate to tumor invasion
- Role of stem cells in tumor metastasis and angiogenesis

**The study sections with most closely related areas of similar science listed in rank order are:**

[Tumor Microenvironment Study Section \[TME\]](#)

[Tumor Cell Biology Study Section \[TCB\]](#)

[Cancer Molecular Pathobiology Study Section \[CAMP\]](#)

[Basic Mechanisms of Cancer Therapeutics Study Section \[BMCT\]](#)

[Intercellular Interactions Study Section \[ICI\]](#)

[Home](#) | [Contact CSR](#) | [Staff Directory](#) | [Site Map](#) | [FOIA](#) | [Disclaimer & Privacy Statements](#) | [Accessibility Statement](#)

Last updated: November 24, 2008



[National Institutes of Health](#)



[Department of Health and Human Services](#)

